



MS APPEAL BRIEF - PATENTS  
PATENT  
3782-0124P

IN THE U.S. PATENT AND TRADEMARK OFFICE

|                              |                             |
|------------------------------|-----------------------------|
| In re application of         | Before the Board of Appeals |
| Petter ERICSON et al.        | Appeal No.:                 |
| Appl. No.: 09/813,112        | Group: 2179                 |
| Filed: March 21, 2001        | Examiner: W. HUTTON JR.     |
| Conf.: 8117                  |                             |
| For: PROCESSING OF DOCUMENTS |                             |

APPEAL BRIEF TRANSMITTAL FORM

MS APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

May 9, 2005

Sir:

Transmitted herewith is an Appeal Brief on behalf of the Appellants in connection with the above-identified application.

- ☐ The enclosed document is being transmitted via the Certificate of Mailing provisions of 37 C.F.R. § 1.8.

A Notice of Appeal was filed on March 9, 2005.

- ☐ Applicant claims small entity status in accordance with 37 C.F.R. § 1.27

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Respectfully submitted,

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Attachment(s)

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**APPEAL BRIEF**

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ON BEHALF OF APPELLANTS:  
PETTER ERICSON ET AL.

MS APPEAL BRIEF  
Board of Patent Appeals  
and Interferences  
P.O. Box 1450  
Alexandria, VA 22313-1450

May 9, 2005

Sir:

Appellants hereby submit the following Appeal Brief in support of the Notice of Appeal filed March 9, 2005. This Appeal is from the Decision of the Examiner dated December 9, 2004, finally rejecting claims 1-30, which are reproduced as an Appendix to this brief.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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**I. REAL PARTY IN INTEREST**

The real party in interest is the assignee of the entire interest in the above-captioned patent application, ANOTO AB, c/o C TECHNOLOGIES AB, Scheelevagen 19C, 223 70 Lund, Sweden.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's Decision in this Appeal.

**III. STATUS OF THE CLAIMS**

Claims 1-30 are pending in the above-captioned application. Claims 1-30 are rejected and the subject of the present Appeal. No claims have been indicated as containing allowable subject matter. Claims 1-2, 16-17, and 22 are independent.

**IV. STATUS OF AMENDMENTS**

No amendments have been presented after the final rejection of December 9, 2004.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The claimed invention is a method of editing a document, the method comprising transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern (specification, para. [068]); receiving editing information from a reading device adapted to read position information from the position coded surface (para. [069]); interpreting the editing of information (para. [071]); and changing the document information depending on an interpretation of the editing information thereby resulting in an updated document (para. [081]).



The claimed invention further includes transferring position-coding pattern information to a printing device adapted to print the position-coding pattern on a surface (para. [075]).

The method further includes receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device (para. [072]). The editing information is associated with a plurality of users wherein each user generates at least one editing command with a reading device (para. [072]).

The method further includes wherein the editing commands generated by the plurality of users are in an ordered sequence identified by at least a timestamp associated with each editing command (para. [075]). The editing information includes position information related to a position of the reading device on the surface wherein the interpretation of the editing information includes interpretation of the position information (para. [073]). The position information may be in the form of sequences of coordinates forming manually generated curves corresponding in form to drawn curves on the printed document (para. [020]). The method may further includes displaying the document information of the updated document to a user (para. [081]). The step of changing the document information may include adding editing information in the form of handwritten annotations to the document (para. [086]). The method may further include associating, based on position information included in the editing information, each of the handwritten annotations with a respective portion of the document information (para. [071]).

The method further includes changing the document information including reformatting one or more parts of the document information (para. [081]). Reformatting is chosen from a group of adding text or graphics to the document information; removing text or graphics from the document information; or repositioning text or graphics included in the document information (para. [073]). Adding text includes converting part of the editing information to machine-readable text (para.

[073]). The method further includes initially registering the document in a pattern administration unit (602) wherein the pattern administration unit assigns a unique sub-set of the position-coding pattern to each page of the document (para. [078]).

The claimed invention is further directed to a computer readable medium having embodied thereon a computer program which can be read by a computer and which comprises instructions for causing a computer to execute a method according to claim 1 or 2 (Fig. 6, ref. no. 603).

The claimed invention further includes a system comprising storage means (603); means for transferring information (Fig. 6) from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern; means for receiving editing information from a reading device (Fig. 6, ref. no. 602) adapted to read position information from a position-coded surface; means for interpreting the editing information (603); and means for changing the document information (603) based on an interpretation of the editing information, thereby resulting in an updated document. The system further includes means for transferring position-coding pattern information (Fig. 6) to a printing device capable of printing the position-coding pattern on a surface.

The claimed invention further includes means for receiving device identity information from the reading device, so as to associate the editing information with a user of the reading device.

The claimed invention further includes means for receiving device identity information from the reading device (para. [072]), so as to associate the editing information with a user of the reading device.

The claimed invention further includes wherein said storage means is included in a computer device which is arranged to initially register said document in a pattern administration unit (602) comprising a database of said position-coding pattern, said pattern administration unit being

arranged to assign a unique subset of said position-coding pattern to each page of said document (para. [078]).

The claimed invention further includes wherein said means for receiving editing information is included in said pattern administration unit (602).

The claimed invention further includes wherein said means for receiving editing information is included in a local processing unit (603).

The claimed invention further provides for a method of editing a document containing information including storing the document information in memory (para. [068]); printing the document information on a surface, wherein the surface contains a readable code contained thereon in addition to the printed document information (para. [068]); enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate to the marked edit instructions (para. [069]); receiving through a processor associated with the memory the edit instructions captured by the electronic pen (para. [069]); and altering the document information to conform to the edit instructions (para. [081]).

The claimed invention further provides for the readable code being a position coding pattern wherein the position coding pattern codes a plurality of positions on the surface, each position being coded by a plurality of symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions (para. [022]).

The claimed invention further provides for the pattern administration unit, in the registering, receiving the document data indicative of the document and a number of document pages (para. [078]).

The claimed invention further comprises registration means which is arranged to initially register the document in a pattern administration unit comprising a database of the position-coding

pattern, the pattern administration unit being arranged to assign a unique subset of the position-coding pattern to each page of the document (para. [078]).

The claimed invention may provide wherein the registration means is arranged to transfer document data indicative of the document and of a number of document pages to the patterns administration unit (para. [078]).

The summary of the claimed invention herein has been made to comply with the Patent Office rules in submitting briefs and is not to be considered as limiting the claimed invention.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The Final Office Action provides three (3) grounds of rejection for review on Appeal.

- 1) Claims 1-4, 6-13, 15-18, and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Henderson* (USP 5,897,648) (hereinafter “*Henderson*”) in view of *Lazzouni et al.* (USP 5,652,412) (hereinafter “*Lazzouni*”);
- 2) Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Henderson* in view of *Lazzouni*, and further in view of *Moody et al.* (USP 5,890,177) (hereinafter “*Moody*”); and
- 3) Claims 14, 19-21 and 25-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Henderson* in view of *Lazzouni*, and further in view of *Dymetman et al.* (U.S. Patent Application Publication No. 2002/0020750) (hereinafter “*Dymetman*”).

## **VII. ARGUMENTS**

- A. **The Rejection Fails to Establish *Prima facie* Obviousness of Claims 1-4, 6-13, 15-18, and 22-24**

## 1. Argument Summary

The reasoning provided in support of the rejection of claims 1-4, 6-13, 15-18, and 22-24 under 35 U.S.C. § 103(a) as being unpatentable over *Henderson* in view of *Lazzouni* fails to establish *prima facie* obviousness. Generally, the deficiencies of the rejection are that the rejection attributes certain claim features to the references that a detailed reading of the references reveals are not taught therein; as the nature and the purpose of the device of *Henderson* is recognized, it is evident that there is no suggestion or motivation in either of the references cited in support of the rejection or in knowledge generally available to those skilled in the art to modify *Henderson* in the manner asserted by the rejection; and by asserting that certain modifications of the device of *Henderson* would have been obvious without proper suggestion or motivation in the applied references or elsewhere to make the asserted modifications, the rejection appears to rely on impermissible hindsight. Such deficiencies exist for the rejection of each of claims 1-4, 6-13, 15-18, and 22-24.

## 2. Legal Requirements of *Prima facie* Obviousness

To establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art and the asserted modification or combination of the prior art must be supported by some teaching, suggestion, or motivation in the applied references or in knowledge generally available to one skilled in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The prior art must suggest the desirability of the modification in order to establish a *prima facie* case of obviousness. *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). It can also be said that the prior art must collectively suggest or point to the claimed invention to support a finding of obviousness. *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986); *In re Ehrreich*, 590 F.2d 902, 908-909, 200 USPQ 504, 510 (C.C.P.A. 1979).

The teaching or suggestion to make the asserted combination or modification of the primary reference must be found in the prior art and cannot be gleaned from applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In other words, the use of hindsight to reconstruct the claimed invention is impermissible. *Uniroyal Inc. v. Rudlan-Wiley Corp.*, 5 USPQ 1434 (Fed. Cir. 1983).

Finally, when considering the differences between the primary reference and the claimed invention, the question for assessing obviousness is not whether the differences themselves would be obvious, but instead whether the claimed invention as a whole would have been obvious. *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

### **3. The Rejection Fails to Establish *Prima facie* Obviousness of Independent Claim 1**

Independent claim 1 is directed to a method of editing a document. The method includes transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern; receiving editing information from a reading device adapted to read position information from the position-coded surface; interpreting the editing information; and changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document.

#### **a. The cited references fail to teach or suggest all of the claim elements as set forth in independent claim 1**

In maintaining the Examiner's rejection of independent claim 1, the Examiner asserts in the Final Official Action on pages 2-3, as follows:

Henderson discloses a method of editing a document (see Figures 1-5; see Column 1, Line 1 through Column 18, line 55), the method comprising:

- transferring document information to a printing device adapted to print the document information on a surface (see Column 2, Line 40 through Column 3, Line 22; see Column 3, Line 46 through Column

12, Line 39 - the electronic document editing system allows a user to send a document to a printer so that the document is printed on paper);

- receiving editing information from a reading device adapted to read position information from the surface (the electronic document editing system allows the user to fix the paper document to a digitizer and edit the document using a digitizer pen);

...

Henderson fails to expressly disclose a printing device that prints the document information on a surface having a *position-coding pattern*.

Lazzouni teaches a method of editing a document (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 - the electronic document editing system includes both blank paper and preprinted forms having pixels), the method comprising:

- a printing device that prints the document information on a surface having a position-coding pattern (the electronic document editing system allows the user to print a form on paper having a prerecorded pattern of pixels),

for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer (see Column 1, Lines 11-45; see Column 2, Lines 18-35 - essentially, the electronic document editing system replaces the tablet with the pixel paper).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Henderson, to include a printing device that prints the document information on a surface having a position-coding pattern for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer, as taught in Lazzouni.

Appellants disagree that *Henderson* discloses receiving editing information from a reading device adapted to read position information from the surface.

The disclosure of *Henderson* is directed to an apparatus and method for editing electronic documents wherein the hard copy of a document is scanned into digital form to provide an electronic version of the document. The original document is then placed on an x-y digitizer pad with the

position of the original document being correlated with the electronic version of the document in order to provide corresponding scaling, rotation, and offset of the documents (Abstract). Editing is performed with a digitizer pen that, in conjunction with the digitizer surface, converts the handwritten edit into digital form (col. 4, lines 3-5).

In support of his rejection of claim 1, the Examiner relies on col. 2, lines 40 - col. 3, line 22 and col. 3, line 46 - col. 12, line 39 to support his assertion that *Henderson* discloses transferring document information to a printing device adapted to print the document information on a surface, namely the hard copy that is positioned on the x-y digitizer pad. The Examiner then asserts that *Henderson* teaches receiving editing information from a reading device adapted to read position information from the surface, asserting *Henderson* discloses an electronic document editing system that allows the user to fix the paper document to a digitizer and edit the document using the digitizer pen. However, *Henderson* clearly notes that the position information is obtained based upon the interaction of the digitizer pen with the digitizer and not the interaction between the pen and the hard copy original.

In further support of the Examiner's rejection of claim 1, the Examiner asserts in the Final Official Action on page 3 as follows:

Lazzouni teaches a method of editing a document (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 - the electronic document editing system includes both blank paper and preprinted forms having pixels), the method comprising:

- a printing device that prints the document information on a surface having a position-coding pattern (the electronic document editing system allows the user to print a form on paper having a prerecorded pattern of pixels),

for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer (see Column 1, Lines 11-45; see Column 2, Lines 18-35 - essentially, the electronic document editing system replaces the tablet with the pixel paper).



Appellants disagree that *Lazzouni* cures the deficiencies of the teachings of *Henderson*, assuming these references are combinable, which Appellants do not admit.

The disclosure of *Lazzouni* is directed to a pen and paper information recording system. The information recording system includes a writing paper having a writing surface and a prerecorded invisible pattern of pixels associated with the writing surface. Each of the pixels contain encoded optically readable position information which identifies a coordinate position on the writing surface. The system further includes a pen having a tip and including an instrument for writing on the writing surface and a detector for detecting the position of the tip on the writing surface by optically reading the pixels and obtaining position information when the tip is in contact with the surface. The system further includes a recording unit coupled to the pen and responsive to the position information for electronically recording the position of the pen tip on the writing surface as the markings are made on the writing surface so that the recording unit contains an electronic representation of the markings on the writing surface (Abstract).

However, there is no teaching or suggestion in *Lazzouni* that is directed to printing document information on a surface having a position-coding pattern as asserted by the Examiner. The Examiner asserts that the electronic document editing system allows a user to print a form on paper having a prerecorded pattern of pixels. However, the Examiner fails to provide any support for this assertion. Should the Examiner be suggesting that the system of *Lazzouni* inherently teaches this element, it has been clearly established that inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. See *Continental Can Co. USA, Inc. v. Monsanto Co.*, 20 USPQ2d 1746, 1749, 1750 (Fed. Cir. 1991).

As neither of the references teach or suggest these claim elements, either alone or in combination, assuming these references are combinable, which Appellants do not admit, Appellants maintain that the Examiner has failed to establish *prima facie* obviousness by failing to provide references that teach or suggest all of the claim elements. Appellants maintain that claim 1 is patentable over the references as cited.

**b. The Examiner has failed to provide proper motivation in support of his rejection of independent claim 1**

In support of the Examiner's rejection of claim 1 in the Final Official Action on page 4, the Examiner asserts as follows:

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in *Henderson*, to include a printing device that prints the document information on a surface having a position-coding pattern for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer, as taught in *Lazzouni*.

The Examiner concludes it would have been obvious to one of ordinary skill in the art to modify the method disclosed in *Henderson* to include a printing device that prints the document information on a surface having a position-coding pattern for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer. Appellants respectfully disagree with the Examiner's characterization of these references and further disagree that these references are properly combinable.

The disclosure of *Henderson* is directed to an apparatus and method for editing electronic documents. As discussed in the Field of the Invention, *Henderson* states that the present invention relates to the use of an x-y digitizer to edit an original or hard copy of a document that has been previously stored in electronic form. As indicated in the Summary of the Invention, the apparatus utilized for editing the documents includes means for positioning an original document on an x-y

digitizer (col. 2, lines 45-46). As can be seen in Figs. 1-3, the x-y digitizer is integral in performing the editing method as set forth in the disclosure of *Henderson*. In discussing the flow diagram depicted in Fig. 1, *Henderson* notes that the digital document may be created first, followed by printing of the document to obtain a hard copy thereof. The original document is then positioned in a fixed location on an x-y digitizer pad (col. 3, lines 53-55). Once the original document is positioned on the digitizer, its position must be correlated with the electronic version of the document (col. 3, lines 59-61). Editing is performed with a digitizer pen that, in conjunction with the digitizer surface, converts the handwritten edit into digital form (col. 4, lines 3-6).

*Henderson* additionally notes that suitable digitizer pens may include writing instruments such as ink pens, graphite pencils, wax pencils and the like, as well as non-marking instruments, cursors, fingers, pointers, light emitting pens, ultrasonic emitting pens, and **any other device that can be used to indicate the x-y coordinate position of the pen in relation to the x-y digitizer** (col. 5, lines 25-33). The digitizer further is incorporated in each of the independent claims as set forth in the *Henderson* reference.

The disclosure of *Lazzouni et al.* is directed to a pen and paper information recording system. The information recording system as disclosed merely provides for a writing paper having a prerecorded invisible pattern of pixels associated with the writing surface for use with a pen including a detector for detecting the position of the tip on the writing surface by optically reading the pixels and obtaining the position information when the tip is in contact with the surface (Abstract). There is no discussion in *Lazzouni et al.* that is directed to editing documents as asserted by the Examiner.

In support of the Examiner's rejection, the Examiner purports to essentially replace the digitizer of *Henderson* with the surface having a position-coding pattern as set forth in *Lazzouni et*

*al.* It is respectfully submitted that this purported combination is wholly improper. First, it is respectfully submitted that one of ordinary skill in the art would not be motivated to modify a device which detects the position of the pen from an x-y digitizing tablet with an arrangement to read position codes imprinted on a surface. There is simply no motivation to make such a change as asserted by the Examiner.

Second, it is well known that if the proposed modification or combination of the prior art would change the principal operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 439 (CCPA 1959). As noted above, the apparatus of *Henderson* is directed to an x-y digitizer in a tablet form that determines the location of a pen by detecting its presence at a sensed location. To suggest modifying the invention where a pen device digitizes its movement by detecting and decoding a position-coding pattern would change the principal operation of the apparatus of *Henderson*. Further, in making such a combination, a substantial modification in the functionality of the *Henderson* reference necessarily needs to be made and, ultimately, would render the apparatus of *Henderson* inoperative. One of ordinary skill in the art would not be motivated to make this modification. As such, the application of the teachings of the references as suggested by the Examiner is insufficient to render the claims *prima facie* obvious. Consequently, no *prima facie* case is made and the combination cannot fairly be made.

In addition to the above arguments, *Henderson* identifies a problem in that there is a need for participants during a teleconference to edit documents in such a manner that allows persons at each remote location to see the annotations (col. 1, lines 53-55). *Henderson* further notes that it may be desirable to electronically transmit the digital form of a document by telephone or computer network to a remote location where the document is displayed on a computer screen or the like (col. 1, lines

22-26). In solving this problem, *Henderson* provides for an x-y digitizer where annotations made on an original document are incorporated and displayed in corresponding locations on an electronic version of the document where the electronic document can be displayed at local and/or remote locations. *Henderson* notes that the invention is useful in many applications, including teleconferencing system where it is desired to interact with a document that is displayed at multiple locations. *Henderson* further notes that a major advantage of the present invention is the ability to directly edit the hard copy of a document while at the same time providing an electronic version of the edit (col. 3, lines 1-15).

In contrast, *Lazzouni* identifies drawbacks of conventional systems directed to two-dimensional input devices for inputting handwritten data and text, sketching and drawing into a host computer where the conventional systems require the transfer in real time of a pen or stylus position on a tablet to a host computer for storage processing or display. *Lazzouni* notes that in conventional applications, it is desirable to have both a handwritten record of the activity and a record in memory. *Lazzouni* notes it is desirable to perform these functions without the need for a host computer, thus permitting portable and field use of the input device. *Lazzouni* proceeds to state that currently available pen-based computer systems are self-contained and utilize a central processing unit and an operating system. An active tablet or a passive tablet is a peripheral device to a host computer which records coordinate position information wherein these systems have serious limitations. *Lazzouni* notes that currently available active tablets have deficiencies in resolution, accuracy, robustness, cost, uniform resistivity, drift, size, weight, reliability and the like. The tablets must be attached to a host computer which limits portable and field use (col. 1, lines 11-35).

In solving these problems, *Lazzouni* provides for a recording unit including a portable housing separate from the pen and electronic circuitry located within the housing for receiving

position information from the detecting means and for storing the position information (col. 2, lines 60-63). The stored data can be supplied to a host computer either immediately or at a later time, thus permitting portable and field use of the information recording apparatus (col. 3, lines 31-34).

In considering the teachings of the cited references, *Henderson* seeks to provide a system that enables edits of a document to be viewed at local and/or remote locations at the same time the hard copy of the document is edited. As such, the disclosure of *Henderson* promotes the use of the digitizing tablet to be incorporated in an on-line system. Appellants maintain that one skilled in the art seeking to modify the teachings of *Henderson* would not look to the teachings of *Lazzouni*, which supports a system that is portable and not directly tied to a host computer. As such, *Henderson* appears to teach away from the purported combination. Similarly, as *Lazzouni* teaches a device that is not tied to a host computer, one skilled in the art would not look to combine the teachings of *Lazzouni* with the teachings of *Henderson* as *Lazzouni* clearly seeks to provide a system that is not tied to a host computer and, thus, *Lazzouni* appears to teach away from the purported combination. As both of the cited references appear to teach away from the purported combination, Appellants maintain that one skilled in the art would not be so motivated to combine the teachings of the cited references. Appellants maintain that, as there is no motivation to combine the references as cited, the Examiner has failed to establish *prima facie* obviousness under 35 U.S.C. § 103.

**c. The rejection of independent claim 1 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni*, with no suggestion or motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning. As such, Appellants maintain that independent claim 1 is patentable over *Henderson* in view of *Lazzouni*.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

The Examiner, in support of his rejection of claim 1, asserts that *Henderson* discloses receiving editing information from a receiving device adapted to read position information from the surface, asserting the electronic document editing system allows the user to fix the paper document to a digitizer and edit the document using a digitizer pen. As noted above with regard to claim 1, *Henderson* clearly teaches using an x-y digitizer to obtain position information. The Examiner admits that *Henderson* fails to teach printing the document information on a surface having a position-coding pattern and relies on *Lazzouni* by purporting to replace a surface having a position-coding pattern with the digitizer.

Appellants maintain that the x-y digitizer reading the position information in *Henderson* would be insufficient to read the position-coding surface in *Lazzouni*. It is well-established that prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). By replacing the digitizing tablet with the position-coded paper of *Lazzouni*, the pen of *Henderson* would be insufficient to read position information as asserted by the Examiner. As such, there would be no reasonable expectation of success in making the purported combination as asserted by the Examiner.

For all of the reasons noted above, Appellants maintain that independent claim 1 is not obvious over the references as cited.

**4. The Rejection Fails to Establish *Prima facie* Obviousness of Independent Claim 2**

The invention of independent claim 2 provides for a method for editing a document. The method includes transferring position-coding pattern information to a printing device adapted to

print the position-coding pattern on a surface; transferring document information to the printing device adapted to print the document information on the surface; receiving editing information from a reading device adapted to read position information from the position-coded surface; interpreting the editing information; and changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

In support of the Examiner's rejection of claim 2 in the Final Official Action at pages 4-6, the Examiner asserts as follows:

Henderson discloses a method of editing a document (see Figures 1-5; see Column 1, Line 1 through Column 18, Line 55), the method comprising:

- transferring document information to a printing device adapted to print the document information on a surface (see Column 2, Line 40 through Column 3, Line 22; see Column 3, Line 46 through Column 12, Line 39 - the electronic document editing system allows a user to send a document to a printer so that the document is printed on paper);

...

Henderson fails to expressly disclose transferring position-coded pattern information to a printing device adapted to print the position-coding pattern on a surface.

Lazzouni teaches a method of editing a document (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 - the electronic document editing system includes both blank paper and preprinted forms having pixels), the method comprising:

- transferring position-coded pattern information to a printing device adapted to print the position-coding pattern on a surface (the electronic document editing system allows the user to print forms on paper having a prerecorded pattern of pixels),

for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer (see Column 1, Lines 11-45; see Column 2, Lines 18-35 - essentially, the electronic document editing system replaces the tablet with the pixel paper).



Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in *Henderson*, to include transferring position-coded pattern information to a printing device adapted to print the position-coding pattern on a surface for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer, as taught in *Lazzouni*.

**a. The Examiner has failed to provide references that teach or suggest all of the claim elements**

Appellants disagree that *Lazzouni* cures the deficiencies of the teachings of *Henderson*, and further disagree that there is proper motivation to combine the references. In support of the Examiner's rejection, the Examiner asserts that *Henderson* discloses the printing device adapted to print the document information on a surface, asserting that the electronic document editing system allows a user to send a document to a printer so that the document is printed on paper. However, *Henderson* clearly teaches that the position information is obtained by determining the position of the stylus when it interacts with the surface of the digitizer (not the hard copy original).

The Examiner notes that *Henderson* fails to teach a position-coded pattern and relies on the teachings of *Lazzouni* to cure the deficiencies of the teachings of *Henderson*, asserting *Lazzouni* discloses transferring position-coded pattern information to a printing device adapted to print the position-coding pattern on a surface. If the Examiner is purporting to have the position-coding pattern printed on the surface of the digitizer tablet, Appellants maintain that there would simply be no motivation to do so for the reasons noted above with regard to claim 1. Further, there is no teaching or suggestion in *Lazzouni* that is directed to transferring document information to the printing device adapted to print the document on the surface. As neither of the references teach or suggest all of the claim elements, either alone or in combination, assuming these references are combinable, which Appellants do not admit, Appellants maintain that the Examiner has failed to establish *prima facie* obviousness.

**b. The Examiner has failed to provide proper motivation in support of the rejection of claim 2**

The Examiner asserts in support of his rejection of claim 2 that one skilled in the art would have been motivated to include transferring position-coding pattern information to a printing device adapted to print the position-coding pattern on a surface for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer. However, as noted above with regard to claim 1, the Examiner's purported replacement of the position-coded paper of *Lazzouni* with the digitizer of *Henderson* is wholly inappropriate and one skilled in the art would not be so motivated. As such, Appellants maintain that the Examiner has failed to provide proper motivation in support of his assertions.

**c. The rejection of independent claim 2 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni*, with no suggestion or motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning. As such, Appellants maintain that independent claim 2 is patentable over *Henderson* in view of *Lazzouni*.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

The Examiner, in support of his rejection of claim 2, asserts that *Henderson* discloses receiving editing information from a receiving device adapted to read position information from the surface, asserting the electronic document editing system allows the user to fix the paper document to a digitizer and edit the document using a digitizer pen. As noted above with regard to claim 2, *Henderson* clearly teaches using an x-y digitizer to obtain position information. The Examiner admits that *Henderson* fails to teach printing the document information on a surface having a

position-coding pattern and relies on *Lazzouni* by purporting to replace a surface having a position-coding pattern with the digitizer.

Appellants maintain that the x-y digitizer reading the position information in *Henderson* would be insufficient to read the position-coding surface in *Lazzouni*. It is well-established that prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). By replacing the digitizing tablet with the position-coded paper of *Lazzouni*, the pen of *Henderson* would be insufficient to read position information as asserted by the Examiner. As such, there would be no reasonable expectation of success in making the purported combination as asserted by the Examiner.

#### **5. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claim 3**

Claim 3 depends directly from claim 1 or 2. Appellants submit that claim 3 is allowable for the reasons set forth above with regard to claim 1 or 2 at least based upon its dependency on claim 1 or 2. Appellants further submit that dependent claim 3 is separately patentable and offer the following additional arguments for the invention of claim 3.

The invention of claim 3 provides for a method further comprising receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device.

In support of the Examiner's rejection of claim 3, the Examiner, in the Final Official Action on page 6, asserts as follows:

Henderson discloses a method according to Claim 1 or 2, further comprising receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device (the electronic document editing system allows multiple remote users to analyze a document during a teleconference and make edits

to the document; the individual users are identified using different pen colors).

Appellants disagree that *Henderson* teaches receiving device identity information from the reading device as recited.

*Henderson* discloses if multiple editing inputs such as different pen colors are used, it is preferred to store each of the various editing inputs separately in order to retrieve individual edits. For example, where different pen colors are used to indicate edits made by different persons, each of the different edits may be stored separately in order to retrieve the individual edits (col. 7, lines 18-24).

*Henderson* further discloses in col. 12, lines 11-17, that for applications such as teleconferencing, operators at various remote locations can make edits that are identifiable with a given location or person. For example, editors at one location may use one color while editors at another location may use a different color. In this manner, the editing inputs from various persons and/or locations can be determined.

However, there is no teaching or suggestion in *Henderson* that is directed to receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device. *Henderson* merely teaches that participants of the teleconference may see different pen colors; however, this teaching is insufficient to teach or suggest the device identity information as claimed. *Lazzouni* fails to cure the deficiencies of the teachings of *Henderson* as *Lazzouni* fails to teach or suggest this claim element. As neither of the references, either alone or in combination, teach or suggest this claim element, Appellants maintain that the Examiner has failed to establish *prima facie* obviousness. Appellants maintain that claim 3 is not obvious over the references as cited.

**6. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claims 4 and 6-12**

Claims 4 and 6-12 depend directly or indirectly on claim 1 or 2. Appellants submit that claims 4 and 6-12 are allowable for the reasons set forth above with regard to claim 1 or 2 at least based upon their dependency on claim 1 or 2. Appellants further submit that dependent claims 4 and 6-12 are separately patentable and offer the following additional arguments for the invention of claim 3.

The rejection of these claims asserts that *Henderson* teaches the incremental features recited therein. Appellants submit, however, that the rejection's reliance on *Henderson* as allegedly teaching these incremental features fails to make up for the deficiencies of the rejection applied to claim 1 or 2. Thus *Henderson*, taken alone or in combination with *Lazzouni*, assuming these references are combinable, which Appellants do not admit, fails to establish *prima facie* obviousness of dependent claims 4 and 6-12.

**7. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claim 13**

Claim 13 depends indirectly from claim 1 or 2. Appellants submit that claim 13 is allowable for the reasons set forth above with regard to claim 1 or 2 at least based upon its dependency on claim 1 or 2. Appellants further submit that dependent claim 13 is separately patentable and offers the following additional arguments for the invention of claim 13.

The invention of claim 13 provides for a method wherein adding text includes converting part of the editing information to machine-readable text.

In support of the Examiner's rejection of claim 13 in the Final Official Action on page 9, the Examiner asserts that *Henderson* discloses this claim element. However, the Examiner fails to

provide any support for this assertion. Appellants maintain that *Henderson* fails to teach or suggest this claim element.

*Henderson* discloses that the x-y coordinates of the digitized edit may be combined with the corresponding x-y coordinates of the electronic version of the original document in order to provide an edited electronic document. A combination of the digitized edit and an electronic version of the original document may be achieved by superimposing each x-y coordinate of the digitized edit on each corresponding x-y coordinate of the electronic version of the original document. *Henderson* provides an example where a particular x-y coordinate of the electronic document is black and where the corresponding x-y coordinate of the digitized edit is black, the resulting edited electronic document will be black at a particular x-y coordinate. *Henderson* provides a further example where a particular x-y coordinate of the electronic document is black and where the corresponding x-y coordinate of the digitized edit is “erase,” the resulting edited electronic document will be erased at the particular x-y coordinate (col. 10, line 63 - col. 11, line 13).

However, there is no discussion in *Henderson* that is directed to converting part of the editing information to machine-readable text. *Lazzouni* fails to cure the deficiencies of the teachings of *Henderson* as *Lazzouni* fails to teach or suggest this claim element. As neither of the references, either alone or in combination, assuming these references are combinable, which Appellants do not admit, teach or suggest this claim elements, Appellants maintain that dependent claim 13 is not obvious over the references as cited.

#### **8. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claim 15**

Claim 15 depends directly from claim 1 or 2. Appellants submit that claim 15 is allowable for the reasons set forth above with regard to claim 1 or 2 at least based upon its dependency on claim 1

or 2. Appellants further submit that dependent claim 15 is separately patentable and offer the following additional arguments for the invention of claim 15.

The rejection of claim 15 asserts that *Henderson* and *Lazzouni* teach the incremental features recited therein. Appellants submit, however, that the rejection's reliance on *Henderson* and *Lazzouni* as allegedly teaching these incremental features fails to make up for the deficiencies of the rejection applied to claim 1 or 2. Thus, *Henderson*, taken alone or in combination with *Lazzouni*, assuming these references are combinable, which Appellants do not admit, fails to establish *prima facie* obviousness of dependent claim 15.

**9. The Rejection Fails to Establish *Prima facie* Obviousness of Independent Claim 16**

Independent claim 16 provides for a system for document editing. The system includes storage means for storing a document; means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern; means for receiving editing information from a reading device adapted to read position information from a position-coded surface; means for interpreting the editing information; and means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

In support of the Examiner's rejection of claim 16, the Examiner merely recites in the Final Official Action on page 11 as follows:

These claims merely recite a computer system that performs the method of Claims 1 and 2, respectively. Accordingly, *Henderson*, in view of *Lazzouni*, discloses/teaches every limitation of the claims as specified in the above rejections for Claims 1 and 2.

Appellants respectfully disagree that *Henderson* and *Lazzouni* render claim 16 obvious.

**a. The rejection of claim 16 fails to teach or suggest all of the claim elements**

As noted above with regard to claim 1, the combination of *Henderson* and *Lazzouni* fails to teach or suggest transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern and receiving editing information from a reading device adapted to read position information from the position-coded surface. As such, Appellants maintain that the combination of the references fails to teach means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern and means for receiving editing information from a receiving device adapted to read position information from a position-coded surface for the reasons noted above with regard to claim 1.

**b. The Examiner's rejection fails to provide proper motivation in support of the rejection of claim 16**

Further, as noted above with regard to claim 1, there is insufficient motivation for combining the teachings as asserted by the Examiner. Thus, the Examiner has failed to establish *prima facie* obviousness.

**c. The rejection of independent claim 16 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni* with no suggestion of motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

Finally, there is no reasonable chance of success as the stylus of the digitizing tablet of *Henderson* would be unable to discern position information from the position-coded surface of *Lazzouni*. As such, Appellants maintain that independent claim 16 is not obvious and thus patentable over *Henderson* in view of *Lazzouni*.



**10. The Rejection Fails to Establish *Prima facie* Obviousness of Independent Claim 17**

Independent claim 17 provides for a system for document editing. The system includes storage means for storing a document; means for transferring position-coding pattern information to a printing device capable of printing the position-coding pattern on a surface; means for transferring information contained in the document to the printing device, the printing device being adapted to print the information on the surface; means for receiving editing information from a reading device adapted to read position information from a position-coded surface; means for interpreting the editing information; means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

**a. The rejection of claim 17 fails to teach or suggest all of the claim elements**

As noted above with regard to claim 2, the combination of *Henderson* and *Lazzouni* fails to teach or suggest transferring document information to a printing device adapted to print the document on a surface having a position-coding pattern and receiving editing information from a reading device adapted to read position information from the position-coded surface. As such, Appellants maintain that the combination of the references fails to teach means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern and means for receiving editing information from a receiving device adapted to read position information from a position-coded surface for the reasons noted above with regard to claim 2.

**b. The Examiner's rejection fails to provide proper motivation in support of the rejection of claim 17**

Further, as noted above with regard to claim 2, there is insufficient motivation for combining the teachings as asserted by the Examiner. Thus, the Examiner has failed to establish *prima facie* obviousness.

**c. The rejection of independent claim 17 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni* with no suggestion of motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

Finally, there is no reasonable chance of success as the stylus of the digitizing tablet of *Henderson* would be unable to discern position information from the position-coded surface of *Lazzouni*. As such, Appellants maintain that independent claim 17 is not obvious and thus patentable over *Henderson* in view of *Lazzouni*.

**11. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claim 18**

Claim 18 depends directly from claim 16 or 17. Appellants submit that claim 18 is allowable for the reasons set forth above with regard to claim 16 or 17 at least based upon its dependency upon claim 16 or 17. Appellants further submit that dependent claim 18 is separately patentable and offer the following additional argument for the invention of claim 18.

Appellants disagree that *Henderson* teaches receiving device identity information from the reading device as recited.

*Henderson* discloses if multiple editing inputs such as different pen colors are used, it is preferred to store each of the various editing inputs separately in order to retrieve individual edits. For example, where different pen colors are used to indicate edits made by different persons, each of

the different edits may be stored separately in order to retrieve the individual edits (col. 7, lines 18-24).

*Henderson* further discloses in col. 12, lines 11-17, that for applications such as teleconferencing, operators at various remote locations can make edits that are identifiable with a given location or person. For example, editors at one location may use one color while editors at another location may use a different color. In this manner, the editing inputs from various persons and/or locations can be determined.

However, there is no teaching or suggestion in *Henderson* that is directed to receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device. *Henderson* merely teaches that participants of the teleconference may see different pen colors; however, this teaching is insufficient to teach or suggest the device identity information as claimed. *Lazzouni* fails to cure the deficiencies of the teachings of *Henderson* as *Lazzouni* fails to teach or suggest this claim element. As neither of the references, either alone or in combination, teach or suggest this claim element, Appellants maintain that the Examiner has failed to establish *prima facie* obviousness. Appellants maintain that claim 18 is not obvious over the references as cited.

**12. The Rejection Fails to Establish *Prima facie* Obviousness of Independent Claim 22**

The invention of claim 22 is directed to a method of editing a document containing information. The method includes storing the document information in memory; printing the document information on a surface, wherein the surface contains a readable code contained thereon in addition to the printed document information; enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate the marked edit instructions; receiving through a processor associated with the

memory the edit instructions captured by the electronic pen; and altering the document information in memory to conform to the edit instructions.

In support of the Examiner's rejection of claim 22, the Examiner asserts in the Final Official Action on pages 12-13 as follows:

Henderson discloses a method of editing a document containing information (see Figures 1-5; see Column 1, Line 1 through Column 18, Line 55), the method comprising:

...

- printing the document information on a surface (the electronic document editing system allows a user to send a document to a printer so that the document is printed on paper);
- enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions (the electronic document editing system allows the user to fix the paper document to a digitizer and edit the document using a digitizer pen);

...

Henderson fails to expressly disclose:

- a surface that contains a readable code contained thereon in addition to the printed document information; and
- capturing the edit instructions by reading the readable code proximate the marked edit instructions.

Lazzouni teaches a method of editing a document (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 - the electronic document editing system includes both blank paper and preprinted forms having pixels), the method comprising:

- a surface that contains a readable code contained thereon in addition to the printed document information (the electronic document editing system allows the user to print forms on paper having a prerecorded pattern of pixels); and
- capturing the edit instructions by reading the readable code proximate the marked edit instructions (the electronic document editing system receives edit markings made by the

user and positions the edits according to their proximity to the pattern of pixels),

for the purpose of allowing handwritten data to be entered into an electronic document without the use of a digitizer (see Column 1, Lines 11-45; see Column 2, Lines 18-35 - essentially, the electronic document editing system replaces the tablet with the pixel paper).

Appellants disagree that the cited references fail to teach or suggest printing the document on a surface wherein the surface contains a readable code contained thereon in addition to the printed document information and enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate to the marked edit instructions.

**a. The rejection of claim 22 fails to teach or suggest all of the claim elements**

As noted above with regard to claim 1, the combination of the references fails to teach or suggest transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern and receiving editing information from a reading device adapted to read position information from the position-coded surface. Similarly, Appellants maintain that the combination of the references fails to teach printing the document on a surface containing a readable code contained thereon in addition to the printed document information and enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate the marked edit instructions. As neither of the references, either alone or in combination, assuming these references are combinable, which Appellants do not admit, teach or suggest all of the claim elements, Appellants maintain that independent claim 22 is allowable over the references as cited.

**b. The Examiner's rejection fails to provide proper motivation in support of the rejection of claim 22**

Further, as noted above with regard to claim 1, there is insufficient motivation for combining the teachings as asserted by the Examiner. Thus, the Examiner has failed to establish *prima facie* obviousness.

**c. The rejection of independent claim 22 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni* with no suggestion of motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

Finally, there is no reasonable chance of success for the reasons noted above with regard to claim 1. As such, Appellants maintain that independent claim 22 is not obvious and thus patentable over *Henderson* in view of *Lazzouni*.

**13. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claims 23 and 24**

Claims 23 and 24 depend from claim 22 and claim 1, respectively. Appellants respectfully submit that claims 23 and 24 are allowable for the reasons set forth above with regard to claims 22 and 1, respectively, at least based upon their dependency on claims 22 and 1, respectively. Appellants further submit that dependent claims 23 and 24 are separately patentable and offer the following additional arguments for the invention of claims 23 and 24.

The rejection of claims 23 and 24 relies on *Lazzouni* to teach the incremental features recited therein. Appellants submit, however, that the rejection's reliance on *Lazzouni* as allegedly teaching these incremental features fails to make up for the deficiencies of the rejections of claim 22 and 1, respectively. Thus *Henderson*, taken alone or in combination with *Lazzouni*, assuming these

references are combinable, which Appellants do not admit, fails to establish *prima facie* obviousness of dependent claims 23 and 24.

**B. The Rejection of Claim 5 Under 35 U.S.C. § 103(a) as Being Unpatentable Over *Henderson* in View of *Lazzouni*, and Further in View of *Moody* Fails to Establish *Prima facie* Obviousness**

**1. The Rejection of Dependent Claim 5 Fails to Establish *Prima facie* Obviousness**

Claim 5 depends indirectly from claim 1 or 2. Appellants respectfully submit that claim 5 is allowable for the reasons set forth above with regard to claim 1 or 2 at least based upon its dependency on claim 1 or 2. Appellants further submit that dependent claim 5 is separately patentable and offer the following additional argument for the invention of claim 5.

The invention of claim 5 is directed to a method wherein the editing commands generated by the plurality of users are in an ordered sequence identified by at least a timestamp associated with each editing command.

In support of the Examiner's rejection of claim 5, the Examiner asserts in the Final Official Action on page 15 as follows:

As indicated in the above discussion, Henderson, in view of Lazzouni, discloses/teaches every element of Claim 4. Henderson also discloses editing commands that are generated by the plurality of users in an ordered sequence (the electronic document editing system allows multiple remote users to analyze a document during a teleconference and make edits to the document; the individual users are identified using different pen colors, and their edits are stored in the system).

Henderson, in view of Lazzouni, fails to expressly disclose editing commands identified by at least a timestamp associated with each editing command.

Moody teaches a method of editing a document (see Figures 1-5; see Column 1, Line 1 through Column 14, Line 40), the method comprising:

- editing commands generated by a plurality of users that are in an ordered sequence identified by at least a timestamp

associated with each editing command (the electronic document editing system records a timestamp that indicates when the edits were made by each of the plurality of users),

for the purpose of determining when a particular edit was made.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in *Henderson*, in view of *Lazzouni*, to include editing commands generated by a plurality of users that are in an ordered sequence identified by at least a timestamp associated with each editing command for the purpose of determining when a particular edit was made, as taught in *Moody*.

Appellants respectfully disagree with the Examiner's characterization of *Henderson* and *Lazzouni*, and further disagree that *Moody* cures the deficiencies of the teachings of *Henderson* and *Lazzouni*.

**a. The rejection of claim 5 fails to teach or suggest all of the claim elements**

As noted above with regard to claim 1, *Henderson* discloses multiple users using different colored pens. However, there is no discussion in *Henderson* that is directed to ordering the edits based upon the different pen colors. While the Examiner admits that *Henderson* in view of *Lazzouni* fails to disclose editing commands identified by at least a timestamp associated with each editing command, the Examiner relies on *Moody* to cure the deficiencies of the teachings of *Henderson* and *Lazzouni*, citing to all of the figures and all of the disclosure, namely col. 1, line 1 - col. 14, line 40.

The disclosure of *Moody* is directed to a method and apparatus for consolidating edits made by multiple editors working on multiple document copies. Each editor is provided with a separate copy of the document. Each editor then edits his own document copy using an editing application program to produce an edited copy. The edited copies are then retrieved and compared and a single marked-up document is created in which sections of the original document and corresponding sections of each of the edited documents are displayed in physically adjacent locations of the display



screen. A set of consolidation tools are provided to quickly transfer edits between the physically adjacent areas of the screen and to make or accept edits made by any of the editors. A final document is made by eliminating the duplicate text in the sections (Abstract).

At col. 10, lines 11-24, *Moody* recites as follows:

If the routine in FIGS. 5A-5C determines that Paragraphs 1 and 2 are similar enough for a match, then a separate routine (not shown) examines Paragraph 1 and Paragraph 2 looking for embedded objects. For example, these objects can consist of a table embedded in a paragraph or a text frame that contains some text. The routine which examines the paragraphs for embedded objects is only performed if it is determined that the original document and the edited copy have the same "heritage". or the edited copy is a continuation of the original document. Heritage is determined by storing, at the time of creation, a creator ID for the creator of the document and a timestamp indicating when the document was created. If both the creator ID and the timestamp match for the original document and the edited copy, then the documents are checked for embedded objects.

There is no teaching or suggestion in *Moody* that is directed to the editing commands generated by the plurality of users being in an ordered sequence identified by at least a timestamp associated with each editing command. *Moody* merely discloses that a timestamp is compared to determine if the document should be checked for embedded objects. As *Moody* fails to cure the deficiencies of the teachings of *Henderson* and *Lazzouni*, Appellants maintain that claim 5 is not obvious and thus allowable over the references as cited.

As noted above with regard to claim 1, Appellants maintain that *Henderson* and *Lazzouni* are not properly combinable.

**b. The Examiner's rejection fails to provide proper motivation in support of the rejection of claim 5**

Further, Appellants maintain that the Examiner has failed to provide proper motivation to combine the teachings of *Moody* with the teachings of *Lazzouni* and *Henderson*. Specifically, the Examiner that one of ordinary skill would have been motivated to combine the teachings of *Moody*

with the teachings of *Henderson* and *Lazzouni* for the purpose of determining when a particular edit was made. However, *Moody* merely teaches utilizing the timestamp in order to determine if a document should be checked for embedded objects. As such, Appellants maintain that there is no proper motivation to combine the references as suggested by the Examiner, and thus the Examiner has failed to establish *prima facie* obviousness under 35 U.S.C. § 103.

**c. The rejection of independent claim 5 relies on impermissible hindsight reasoning**

By asserting it would have been obvious to modify *Henderson* to include the features of *Lazzouni* with no suggestion of motivation in the applied references or elsewhere to do so, the rejection appears to rely on impermissible hindsight reasoning.

**d. There is no reasonable expectation of success in the Examiner's purported combination of *Henderson* and *Lazzouni***

Finally, there is no reasonable chance of success for at least the reasons noted above with regard to claim 1. As such, Appellants maintain that independent claim 5 is not obvious and thus patentable over *Henderson* in view of *Lazzouni*.

**C. The Rejection of Claims 14, 19-21 and 25-30 Under 35 U.S.C. § 103(a) as Being Unpatentable Over *Henderson* in View of *Lazzouni*, and Further in View of *Dymetman* Fails to Establish *Prima facie* Obviousness**

**1. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claims 14, 25, and 26**

Claims 14, 25, and 26 depend directly from claim 1 or 2. Appellants submit that the rejection of claims 14, 25, and 26 fails to establish *prima facie* obviousness for at least the reasons set forth above with regard to claim 1 or 2. Appellants further submit that dependent claims 14, 25, and 26 are separately patentable and offer the following additional argument for the invention of claims 14, 25, and 26.

The rejection of claims 14, 25, and 26 asserts that *Dymetman* teaches the incremental features recited therein. Appellants submit, however, as noted above with regard to claim 1 or 2, that the Examiner has failed to provide references that teach or suggest all of the features recited therein. As the Examiner has failed to provide references that teach or suggest all of the elements set forth in claims 1 or 2, in combination with the elements set forth in claims 14, 25, and 26, respectively, it is respectfully submitted that the Examiner has failed to establish *prima facie* obviousness. Thus, claims 14, 25 and 26 are patentable over *Henderson* in view of *Lazzouni* and *Dymetman*.

**2. The Rejection Fails to Establish *Prima facie* Obviousness of Dependent Claims 19-21 and 27-30**

Claims 19-21 and 27-30 depend directly from claim 1 or 2. Appellants submit that the rejection of claims 19-21 and 27-30 fails to establish *prima facie* obviousness for at least the reasons set forth above with regard to claim 1 or 2. Appellants further submit that dependent claims 19-21 and 27-30 are separately patentable and offer the following additional argument for the invention of claims 19-21 and 27-30.

The rejection of claims 19-21 and 27-30 asserts that *Dymetman* teaches the incremental features recited therein. As the Examiner has failed to provide references that teach or suggest all of the elements set forth in claims 1 or 2, in combination with the elements set forth in claims 19-21 and 27-30, respectively, it is respectfully submitted that the Examiner has failed to establish *prima facie* obviousness. Thus, claims 19-21 and 27-30 are patentable over *Henderson* in view of *Lazzouni* and *Dymetman*.

**VIII. CONCLUSION**

The withdrawal of the outstanding rejections and the allowance of claims 1-30 is earnestly solicited.

Respectfully submitted,

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## CLAIMS APPENDIX

1. (Original) A method of editing a document, the method comprising:  
transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern;  
receiving editing information from a reading device adapted to read position information from the position-coded surface;  
interpreting the editing information; and  
changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document.
  
2. (Previously Presented) A method for editing a document, the method comprising:  
transferring position-coding pattern information to a printing device adapted to print the position-coding pattern on a surface;  
transferring document information to the printing device adapted to print the document information on the surface;  
receiving editing information from a reading device adapted to read position information from the position-coded surface;  
interpreting the editing information; and  
changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

3. (Original) A method according to claim 1 or 2, further comprising receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device.

4. (Original) A method according to claim 1 or 2, wherein the editing information is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device.

5. (Original) A method according to claim 4, wherein the editing commands generated by the plurality of users are in an ordered sequence identified by at least a timestamp associated with each editing command.

6. (Original) A method according to claim 1 or 2, wherein the editing information includes position information related to a position of the reading device on the surface, and wherein the interpretation of the editing information includes interpretation of the position information.

7. (Original) A method according to claim 6, wherein the position information is in the form of sequences of coordinates forming manually generated curves corresponding in form to drawn curves on the printed document.

8. (Original) A method according to claim 1 or 2, further comprising displaying the document information of the updated document to a user.

9. (Original) A method according to claim 1 or 2, wherein the step of changing the document information includes adding editing information in the form of handwritten annotations to the document.

10. (Original) A method according to claim 9, further comprising associating, based on position information included in the editing information, each of the handwritten annotations with a respective portion of the document information.

11. (Original) A method according to claim 1 or 2, wherein changing the document information includes reformatting one or more parts of the document information.

12. (Original) A method according to claim 11, wherein said reformatting is chosen from the group of:

adding text or graphics to said document information; removing text or graphics from said document information; or repositioning text or graphics included in said document information.

13. (Original) A method according to claim 12, wherein adding text includes converting part of the editing information to machine-readable text.

14. (Original) A method according to claim 1 or 2, further comprising initially registering said document in a pattern administration unit, wherein the pattern administration unit assigns a unique subset of said position-coding pattern to each page of said document.

15. (Original) A computer readable-medium having embodied thereon a computer program which can be read by a computer and which comprises instructions for causing a computer to execute the method according to claim 1 or 2.

16. (Previously Presented) A system for document editing, the system comprising:

- storage means for storing a document;
- means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern;
- means for receiving editing information from a reading device adapted to read position information from a position-coded surface;
- means for interpreting the editing information; and
- means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

17. (Original) A system for document editing, the system comprising:

- storage means for storing a document;
- means for transferring position-coding pattern information to a printing device capable of printing the position-coding pattern on a surface;
- means for transferring information contained in the document to the printing device, the printing device being adapted to print the information on the surface;
- means for receiving editing information from a reading device adapted to read position information from a position-coded surface;
- means for interpreting the editing information;



means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.

18. (Original) A system according to claim 16 or 17, further comprising means for receiving device identity information from the reading device, so as to associate the editing information with a user of the reading device.

19. (Original) A system according to claim 16 or 17, wherein said storage means is included in a computer device which is arranged to initially register said document in a pattern administration unit comprising a database of said position-coding pattern, said pattern administration unit being arranged to assign a unique subset of said position-coding pattern to each page of said document.

20. (Original) A system according to claim 19, wherein said means for receiving editing information is included in said pattern administration unit.

21. (Original) A system according to claim 19, wherein said means for receiving editing information is included in a local processing unit.

22. (Original) A method of editing a document containing information, the method comprising:

storing the document information in memory;

printing the document information on a surface, wherein the surface contains a readable code contained thereon in addition to the printed document information;

enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate the marked edit instructions;

receiving through a processor associated with the memory the edit instructions captured by the electronic pen; and

altering the document information in memory to conform to the edit instructions.

23. (Original) The method of claim 22, wherein the readable code is a position coding pattern.

24. (Previously Presented) The method of claim 1, wherein the position-coding pattern codes a plurality of positions on the surface, each position being coded by a plurality of symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions.

25. (Previously Presented) The method of claim 14, wherein the pattern administration unit, in the registering, receives document data indicative of the document and of a number of document pages.

26. (Previously Presented) The method of claim 25, wherein the document data includes the document.

27. (Previously Presented) The system of claim 16, further comprising:

registration means which is arranged to initially register the document in a pattern administration unit comprising a database of the position-coding pattern, the pattern administration unit being arranged to assign a unique subset of the position-coding pattern to each page of the document.

28. (Previously Presented) The system of claim 27, wherein the storage means and the registration means are included in a computer device.

29. (Previously Presented) The system of claim 27, wherein the registration means is arranged to transfer document data indicative of the document and of a number of document pages to the pattern administration unit.

30. (Previously Presented) The system of claim 29, wherein the document data includes the document.